



## Frequently Asked Questions Concerning Baiting and the Use of Hounds to Hunt Bear

### Questions Concerning the Use of Bait to Hunt Bears

***Recognizing that 80% of the bear harvest occurs over bait (2001 figures), do you believe there is the appropriate level of oversight for the total number of bait stations?***

Title 12, Part 10, Chapter 709, Subchapter 3, provides the following regulatory oversight:

#### §7451

**3. Placing of bear bait.** Placing of bear bait shall be in conformity with the following provisions.

A. Bait may not be used to hunt or trap black bear, unless:

- (1) The bait is placed at least 50 yards from any travel way that is accessible by a conventional 2-wheel or 4-wheel drive vehicle;
- (2) The stand, blind or bait area is plainly labeled with a 2-inch by 4-inch tag with the name and address of the baiter;
- (3) The bait is placed more than 500 yards from any dump or campground;
- (4) The bait is placed more than 500 yards from an occupied dwelling, unless written permission is granted by the owner or leasee;
- (5) The bait is placed not more than 30 days before the opening day of the season and not after October 31st;
- (6) The bait areas will be cleaned up by November 10th, as defined by the state litter laws; and
- (7) The person hunting from any stand or blind of another person has permission of the owner of that stand or blind.

#### §7452. Prohibited acts relating to bear

**1-C. Illegal baiting of bear.** A person is guilty of illegally baiting bear if that person places bear bait in any manner which does not conform to section 7451, subsection 3. [1989, c. 493, §31 (new).]

In addition to the regulatory oversight provided in Title 12, many of the large forest landowners and/or managers in Maine have developed specific policies governing bait sites, bait site fees, liability protection, tree stands, and the administration and enforcement of their bear-hunting requirements.

[For example, the North Maine Woods Association (NMW), an organization that manages public use on industrial forestland, other large forest landowners, and Bureau of Public Lands requires bear hunters to apply for a bait site permit. The permit system was designed to minimize conflict between hunters and ensure safety (forest workers, hunters, other public) by regulating the number and location of bear bait sites. In general, a bear-bait site must be no less than ½ mile from another bait site and bear baits are not allowed in areas with active logging operations. Landowners have also exercised the right of revoking bear baiting privileges for hunters that have been summoned for a fish or wildlife violation or who have caused conflict with other hunters. The NMW established a committee that meets annually to discuss bear hunting issues on NMW managed lands. This committee includes MDIFW biologists, Maine guides, game wardens, and NMW staff.]

***What types of problems, if any, have been associated with bait stations?***

An earlier problem associated with the clean-up and removal of bait sites is addressed in the regulatory framework governing the timing of bait placement and its required clean-up.

Occasionally there are “problems” that arise when hound-hunters and bait-hunters are hunting in proximity to each other and bear hounds run through a bait site or the hounds give chase to a bear from a bait site. Bear hunters generally resolve these problems by talking to each other and by showing respect for the hunting activities of the other. As appropriate, the Department helps to facilitate communication between hound-hunters and bait-hunters.

***Is baiting essential to management of bears in Maine, and how prevalent is baiting of bears in the U.S.?***

Based on our current knowledge and professional judgment, the loss of baiting will limit our ability to meet the population management goals and objectives for black bears -- the extent of this limitation will not be fully known until after the fact. The Department population objective for bears is to “Stabilize the bear population by 2005 at no less than current (1999) levels, through annual hunting and trapping harvests.” We estimate that the population has increased since 1999, and that an annual harvest of between 3,500 and 4,000 bears is required to reach the population objective. In 2002, 76.4% of the bear harvest was attributed to hunters hunting over bait. In the last 4 years (1999 - 2002), an average of 2,895 bears were taken over bait annually, which was 78.0% of the total average annual harvest (see attached table).

The number of bears killed by bait hunters, dog hunters, and trappers averages 3,337 (1999 – 2002). This harvest level may be difficult to achieve by other methods. Currently (1999 – 2002), 174,000 deer hunters, and an unknown number of other hunters, are harvesting an average of 377 bears annually, far below the 3,500 and 4,000 bears required to reach the population objective. It is expected that few hunters, (especially nonresident hunters) who currently hunt over bait or with the aid of hounds or trappers, will try to still-hunt or stalk bears.

Other states have reported being able to harvest significant numbers of bears without the aid of baits or hounds, but most of these states can be characterized as being western states with very open habitats and concentrated bear populations, or eastern states with predominantly hardwood stands and open undergrowth. States like Pennsylvania have large numbers of bear hunters who are allowed to drive bears. We question whether 3,500+ bears can be harvested in Maine via stalking or still-hunting because of Maine's dense forest understory and vast wetlands that allow bears to remain secluded.

We may be able to achieve a bear kill of 3,500 - 4,000 animals required for the population objective by increasing bag limits, implementing a spring season, lengthening the season, etc., but even those measures may not make up for the loss of bait hunts.

***Does the (baiting) program bring in significant revenue and is it needed to manage bears?***

Although overall participation in hunting in Maine is declining slightly, sales of bear permits have risen from 10,133 permits in 1992 to 15,252 in 2002. Nonresidents purchased nearly half of the permits last year (resident 7,855, nonresident 7,372, Indian 25).

The fiscal impact of the early bear season on the Department is significant because of the number of permits sold. Current license and permit sales are summarized below.

<u>Type of Permit</u>	<u># Sold</u>	<u>Permit</u>	
		<u>Cost</u>	<u>Total Cost</u>
NR Bear Permit	7,372	\$65	\$ 479,180
NR Hunting License	7,372	\$85	\$ 626,620
Resident Bear Permit	7,855	\$25	\$ 196,375
Resident Hunting License	<u>7,855</u>	<u>\$19</u>	<u>\$ 149,245</u>
Total Financial Impact to the Department			\$1,451,420

A survey of bear hunters in 1988 estimated that 20,676 hunters (14,321 residents; 6,355 nonresidents) pursued bears that year (Reiling et al. 1991). These numbers are estimates based on all resident and nonresident Maine hunting license holders who indicated they hunted bears in Maine during 1988. Most nonresident respondents (62%) indicated they hired a Registered Maine Guide to assist them during their hunt; only 4% of resident bear hunters used the services of a guide.

Using the percentage of nonresident hunters that use a guide as a basis, and multiplying by an average price of \$1,100 for a guided hunt, the direct fiscal impact to the guiding industry in 2002 was \$5,027,704 (7,372 NR bear hunter X 0.62 X \$1,100). This figure does not include any measure of other impacts such as retail sales or taxidermy. This impact is delivered in the more rural areas of the state, primarily the northern, eastern, and western mountain regions.

The 1988 survey of bear hunters estimated that bear hunting generated \$6.4 million, including \$3.4 million of new money for the State's economy provided by nonresident hunters (Reiling et al. 1991). This estimate was before bear hunting permits were required. No other measures of the economic benefit of bear hunting have been published, however, it is reasonable to expect the economic impact in 2002 was much higher, because just the economic impact on Department license sales and on guides is estimated to be in excess of \$6.4 million. This does not include retail sales, taxidermy, etc.

It should be noted that funds generated from the sales of bear hunting licenses are not dedicated to the management of bears, but is pooled for Department-wide use. Therefore, any loss of funds from bear license sales may affect management of other wildlife species.

***Could baiting actually increase the population by increasing the reproductive rate of bears through a supplemental feeding program at the onset of their breeding season?***

If bait is having a positive effect on bear reproduction, we have not been able to detect it so far. Based on den entry and reproductive success data, it appears that late fall food is still the driving influence on bear reproduction in Maine. From 1982 through 1996, McLaughlin (1998) observed that most litters produced in the northern bear study area (Spectacle Pond) occurred following a fall when beechnuts were common or abundant. Following years of beechnut scarcity, only 15% of the breeding females produced cubs, whereas, following years of beechnut abundance, 82% of the breeding females produced cubs. Recently, the reproductive synchrony in the Spectacle Pond Study Area has been dampened by a sub-par beechnut year followed by a better than average non-beechnut year. However, the bears still den early and produce fewer cubs when natural fall foods are not available, indicating that baiting is not having a major affect on reproductive success. Reproductive success in the Stacyville and

Bradford study areas has been much more stable because of the more stable natural food supply.

Most bears' diets during the two-month baiting period are comprised of natural foods as evidenced by analysis of scats and stomach contents of killed bears at bait sites. Additionally, bears are leaner and enter dens earlier in years when mast (nuts, seeds, or fruit produced by woody plants) production is poor, despite the availability of bait.

***HSUS claims that of the 27 states that allow bear hunting, "only" 10 allow baiting: Alaska, Arkansas (only on private lands), Idaho, Maine, Michigan, Minnesota, New Hampshire, Utah, Wisconsin, and Wyoming.***

This is correct. Baiting is allowed in those 10 states. Baiting is also allowed in the provinces of Alberta, Saskatchewan, Manitoba, Ontario, Quebec, New Brunswick, Nova Scotia, Labrador, and Newfoundland.

***What type of bait is used and what other species use the bait stations? How might baiting for bears impact populations of other predators, and as a result their prey?***

In general, any high calorie or high protein food that is easily purchased in large quantities may be used as bear bait. The most prominent type of bait used in Maine is pastries, which are used in combination with the following: meat scraps, molasses, beaver carcasses, used fryolator grease, table scraps, fish, honey, grains, fruits, candy, french fries, and breads. That said, most bears' diets during the two-month baiting period is comprised of natural foods as evidenced by analysis of scats and stomach contents of killed bears at bait sites. Additionally, bears are leaner and enter dens earlier in years when mast (nuts, seeds, or fruit produced by woody plants) production is poor, despite the availability of bait.

Bear consume most of the food at active bait sites that are well maintained. Often, a hunter will take measures to exclude nontarget species from feeding on baits. Other species observed feeding at bait sites include raccoons, marten, coyote, porcupine, snowshoe hare, squirrels, skunks, many small mammals, ravens, turkey vultures, bald eagles, Canada jays, and various small birds (Randy Cross, personal communication). Randy has observed coyotes, hawks, and owls "hunting" squirrels and small mammals around bait sites. With the possible exception of squirrels and small mammals in the immediate vicinity of the bait site, the impact of bait on other species is thought to be minimal.

***Do we have examples in other states that have recently eliminated bear baiting and know what the impact was on the bear population and on total number of bears taken? (Colorado, Oregon, Washington?).***

The Department is in the process of polling states where the use of bait and hounds to hunt bear has been restricted or eliminated to inquire as to impacts on the bear population and bear management programs.

***Does baiting have the potential to exacerbate conflicts between bears and people?***

Based on a review of bear nuisance complaints, including an analysis of our research bears involved in nuisance complaints, we do not believe that baiting exacerbates conflicts between bears and people. We began studying black bears in 1975 on 3 study areas in northern, north-central, and central Maine. Bears are hunted over bait in all 3 study areas, and bait was used to capture bears for research. We have captured and marked 1,641 bears during the last 28 years. Only 12 (<1%) of our research bears were involved in bear nuisance complaints; 8 of the 12 incidents were not associated with human foods (4 bears disturbed beehives, 3 destroyed oat or corn crops, and 1 disturbed a bird feeder). Despite the recent increase in bear baiting, only 3 of the 12 study bears were involved in nuisance complaints since 1990.

In 2002, with an estimated 23,000 bears statewide, MDIFW documented 164 conflicts (<1 %) between humans and bears.

The North Maine Woods manages 4 million acres of land for bear hunting with bait densities of 1 bait site/2 mi<sup>2</sup>. Conflicts between bears and humans over the last 10 years has averaged  $193 \pm 16.9$  (mean  $\pm$  standard error) bear complaints annually. Nuisance bear complaints have remained relatively stable with the exception of a few years when complaints nearly doubled as a result of poor natural food crops.

In Maine, bear populations occur in the forested region of the state, where human population densities are lower. Bear populations are much lower in coastal and southern Maine, where our highest human populations exist. Conversely, states like New Jersey with high human densities have over 1,500 bear complaints a year with an estimated 3,250 bears in the state. Bears have not been hunted in New Jersey since 1969. New Jersey's high number of nuisance bear complaints (1,500 annually) is reflective of increasing bear populations and increased human development in bear habitat (Kelcey Burgess, NJ Bear Biologist personal communication).

***If baiting does not have the potential to exacerbate conflicts between bears and people, how do we reconcile a policy to discourage the public from feeding bears, while at the same time allowing hunters to bait them?***

The distinction between a policy that discourages the public from feeding bears, while at the same time allowing hunters to bait them, is predicated on the concern for public safety. When people feed bears, they are often in close, direct contact with the bears. As bears learn to associate humans with food and as bears become habituated to humans and lose their fear, they became bold and aggressive in obtaining or defending human-associated foods. The unfortunate result of this interaction is that injuries and deaths to humans began to occur, and bears must be destroyed.

For example, open dumpsites were favorite viewing areas for bears historically, and dumpsites were maintained and managed for bear viewing opportunities in National and State Parks. In some cases, grandstands or other seating were often built close to dumpsites putting bears and people in close contact. In Yellowstone National Park, as bears became accustomed to people, they began to lose their fear of humans and began to beg (black bears more than grizzlies) for food along roadsides. Bears became more bold and aggressive in obtaining or defending human associated foods and injuries and deaths to humans began to occur. As a result, open dumpsites within National and State Parks were closed and feeding bears was prohibited to prevent future conflicts between bears and people (Craighead et al. 1995).

When hunting bears over bait, hunters conceal themselves (camouflage, cover scent) to prevent bears from detecting their presence and thus increasing their hunting success. Hunter concealment, although not the emphasis, reduces a bear's opportunity to associate foods used at bait sites with humans.

#### Questions Concerning the Use of Hounds to Hunt Bear

##### ***Does use of hounds to track bears impact any nontarget species?***

Most people who pursue bear with dogs work to minimize the chasing of nontarget animals. Some of the best bear dogs never chase or bark at nontargets if they are started with veteran, well-trained dogs. Experienced handlers do not put young or inexperienced dogs in situations where they have a chance of running a nontarget. If a dog starts a chase on a nontarget, an experienced handler will intercept and terminate the chase. This will usually be followed by corrective measures.

##### ***How are hounds trained to key in only on bears?***

One of the most effective and common ways of training young dogs is to train them with experienced dogs with proven histories of not running nontarget animals. Most dogs have a natural tendency to follow other dogs at least for a little while. The more bear chases a young dog is involved in, the greater the probability it will not stray to nontargets. Any time a dog exhibits a tendency toward a nontarget (e.g. barks while riding in the back of a truck at a nontarget such as a moose, deer, or coyote), an experienced handler will take corrective measures to stop the behavior and will continued corrective measures until the behavior is stopped.

##### ***Do hounds ever target species other than bears?***

Hounds may target species other than bears (e.g., coyotes, deer, or moose), but it is an uncommon occurrence when the dogs are properly trained. When it does

occur, the nontarget invariably has the speed, endurance, and knowledge of the “escape habitat” to out run the dogs. [See also the previous two responses.]

***Would we know if hounds target species other than bears?***

Most of the time a hunter will know if a hound has targeted a species other than a bear. Experienced hunters often are familiar with the variation in their dog’s voice and behavior at different times during a chase (e.g., whether the track is old or new; whether the bear has been “jumped” from a bedding or feeding site; whether the dogs are still trailing scent leading to the bear; whether the dogs are baying at a walking bear or whether they have the bear “bayed up” in one location; whether they have the bear treed; or whether they are chasing a nontarget). These are reliable indicators to the handler of what is transpiring at any point in the chase.

***How important is hound hunting in managing bears ... is it needed to limit the bear population?***

The current population objective for bears is to “Stabilize the bear population by 2005 at no less than current (1999) levels, through annual hunting and trapping harvests.” We estimate that the population has increased since 1999, and that an annual harvest of between 3,500 and 4,000 bears is required to reach the population objective.

Over the past ten years (1993-2002) the mean percentage of the bear harvest that was derived from hound hunting was  $11.6\% \pm 0.7\%$  (mean  $\pm$  standard error). The highest percentage of the bear harvest attributable to hound hunters was in 1993 when hunters using hounds took 15.4% of the harvest. In general, as the bear harvest has increased the last 10 years, the percentage of bears taken by hunters using hounds has decreased slightly.

If the bear harvest from hound hunters was removed from the total bear kill, an average of  $3,355 \pm 123$  bears would have been harvested annually during the period 1999 to 2002. Given this lower harvest figure, the Department would not have achieved its current harvest objectives (i.e., a harvest of between 3,500 and 4,000 bears annually).

***Does hunting with hounds bring in significant revenue that is used to manage bears?***

In 2002, there were 375 bears taken with the aide of hounds. The average hound hunt was \$1,581 for those guides advertising their prices on the Internet. If we assume there were 1,462<sup>1</sup> hound hunters in 2002 and that all hound hunters were guided, up to \$2,311,422 was generated for Maine's economy last

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<sup>1</sup> (1462 hound hunters = 375 bears harvested  $\div$  a success rate of 0.2565)



year. This income gets distributed through the community when guides purchase bait for attracting bears, veterinary care and food for their dogs, food and lodging for their clients, and other equipment purchases.

Direct contributions to the Department come from sales of hunting licenses and bear permits. Again, If we assume there were 1,462 hound hunters in 2002 and that 702 (48%) and 760 (58%) of the bear permits were purchased by nonresidents and residents respectively, the total economic impact of hunting bears with hounds to the Department is estimated to be \$138,740.

		<u>Permit</u>	
<u>Type of Permit</u>	<u># Sold</u>	<u>Cost</u>	<u>Total Cost</u>
NR Bear Permit	702	\$65	\$ 45,630
NR Hunting License	702	\$85	\$ 59,670
Resident Bear Permit	760	\$25	\$ 19,000
Resident Hunting License	<u>760</u>	<u>\$19</u>	<u>\$ 14,440</u>

Financial Impact to the Department (Hound Hunters) \$138,740

Money generated from license and permit sales is not dedicated to the management of a certain species, but rather is pooled for Department-wide use. Therefore, any loss of funds from bear license and permit sales may affect the management of other wildlife.

***Pennsylvania hunters kill more than 2,000 bears annually without the aid of hounds.***

Other states have reported being able to harvest significant numbers of bears without the aid of baits or hounds, but most of these states can be characterized as being western states with very open habitats and concentrated bear populations, or eastern states with predominantly hardwood stands and open undergrowth. States like Pennsylvania have large numbers of bear hunters who are allowed to drive bears. We question whether 3,500+ bears can be harvested in Maine via stalking or still-hunting because of Maine's dense under story and vast and varied wetlands that help bears remain secluded.

***Is hound hunting stressful to wildlife?***

With hounds and bears, the odds favor the bear. Bears are in much better shape, are adapted to environmental conditions, and know the terrain. Pursued bears will only run as fast as the fastest dog and will actually walk on the long chases (Brad Allen, personal communication). The duration of the chase usually depends on the age and physical stamina of the bear. Experienced dog

handlers frequently terminate a chase after 2-3 hours, especially when pursuing a small bear, because they know it's very unlikely they will tree the bear. Relaying packs of dogs (with fresh dogs) into chases is a different story, but with Maine's 4-dog limit the odds are that the bear will outrun the hounds.

"Treeing" occurs if/when the bear becomes sufficiently pressured by hounds. During 17 years of working with bear dogs, Department regional wildlife biologist Doug Kane never saw a bear collapse or die during or after (i.e. collared research bears) a chase.

It is understandable for people not experienced in hunting with dogs to imagine that the barking of dogs pursuing bears causes significant disruption to other wildlife species. Most animals not being pursued by dogs usually stop and listen for a short time, move a short distance away, or they don't react at all (Elowe 1990).

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